

22. (Amended) [A] An isolated mutant human aspartoacylase yhaign either an altered ability to hydrolyze N-acetyl-aspartic acid to aspartate and acetate, as compared with a normal human aspartoacylase, or incapable of hydrolyzing N-acetyl-aspartic acid to aspartate and acetate, and having the amino acid sequence SEQ ID NO: 2, except for said mutation, which is

E285 > A,

Y231 > X, and/or

A305 > E,

or an allelic variant of said mutant aspartoacylase.

24. (Amended) A mutant aspartoacylase of claim [23] 22, wherein the glutamic acid at amino acid position 285 is substituted by alanine.

*Please add the following new claims:*

66. (New) A fragment of a mutant human aspartoacylase of claim 22, comprising an aspartoacylase epitope.

67. (New) A recombinant normal human aspartoacylase capable of hydrolyzing N-acetyl aspartic acid to aspartate and acetate, having an amino acid sequence which has a sequence identity of at least 95% to the sequence of SEQ ID NO: 2.

68. (New) A fragment of a recombinant normal human aspartoacylase of claim 20, comprising an aspartoacylase epitope.

continued

(b) isolating the thus-produced normal aspartoacylase.

